

UNITED STATES DISTRICT COURT  
DISTRICT OF KANSAS

UNITED STATES,	)	
PLAINTIFF, and the	)	
	)	
STATE OF KANSAS	)	
Plaintiff-Intervenor,	)	Civil Action Number:
	)	
v.	)	
	)	
U.S. ENERGY PARTNERS, LLC	)	
<u>Defendant.</u>	)	

CONSENT DECREE

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## CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (“Plaintiff” or “the United States”), on behalf of the United States Environmental Protection Agency (“EPA”), has, simultaneously with lodging of this Consent Decree, filed a Complaint alleging that Defendant, U.S. Energy Partners, LLC (“U.S. Energy” or “Defendant”) commenced construction of a major emitting facility and major modification of a major emitting facility in violation of the Prevention of Significant Deterioration (“PSD”) requirements at Part C of the Clean Air Act (the “Act”), 42 U.S.C. §§ 7470-7492, and the regulations promulgated thereunder at 40 C.F.R. § 52.21 (the “PSD Rules”);

WHEREAS, Plaintiff further alleged that Defendant commenced construction of an emitting facility or modified an emitting facility, the ethanol plant located in Russell, Kansas, without first obtaining the appropriate preconstruction permits and installing the appropriate air pollution control equipment required by 40 C.F.R. § 52.21 and the Kansas State Implementation Plan (“SIP”) approved pursuant to 42 U.S.C. § 7410;

WHEREAS, Plaintiff further alleged that potential air emissions from the Defendant’s facility were underestimated;

WHEREAS, the State of Kansas, through the Kansas Department of Health and the Environment (“KDHE” or “Plaintiff-Intervenor”), has, simultaneously with lodging of this Consent Decree, filed a Complaint in Intervention, alleging that U.S. Energy was and is in violation of the Kansas SIP, by failing to obtain the appropriate pre-construction permits, by failing to accurately report emissions increases, and by failing to install appropriate pollution control technology, in violation of applicable state laws, including K.A.R. 28-19-350;

WHEREAS, U.S. Energy was formed in February 2001 under Kansas State law;

WHEREAS, the State of Kansas issued a construction permit to U.S. Energy in March of 2001, and ethanol production began in October of 2001;

WHEREAS, U.S. Energy has produced ethanol in the following quantities:

- 2001 - 3.71 million gallons
- 2002 - 34.21 million gallons;
- 2003 - 45.5 million gallons;

WHEREAS, U.S. Energy has worked cooperatively with EPA and KDHE regarding the alleged violations and voluntarily provided requested information without information requests under Section 114 of the Act, 42 U.S.C. § 7414;

WHEREAS, the Defendant does not admit the violations alleged in the Complaints;

WHEREAS, the United States and Plaintiff-Intervenor (collectively “Plaintiffs”), and the Defendant have agreed that settlement of this action is in the best interest of the parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, Plaintiffs and the Defendant consent to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaints, it is hereby ORDERED AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. The Complaints state a claim upon which relief can be granted against the Defendant under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C.

§ 1355. This Court has jurisdiction of the subject matter herein and over the parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c).

## II. APPLICABILITY

2. The provisions of this Consent Decree shall apply to and be binding upon the Plaintiffs and upon the Defendant as well as the Defendant's officers, employees, agents, successors and assigns. In the event Defendant proposes to sell or transfer the ethanol plant subject to this Consent Decree before termination of the Consent Decree, it shall advise such proposed purchaser or successor-in-interest in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to the EPA Regional Administrator for Region 7 before such sale or transfer, if possible, but no later than the closing date of such sale or transfer. The Defendant shall provide a copy of the Consent Decree and the Control Technology Plan required in Paragraph 4 of this Consent Decree to the proposed purchaser or successor-in-interest. In the event the Defendant sells or otherwise assigns any of its right, title, or interest in its ethanol plant, prior to termination of the Consent Decree, the conveyance shall not release the Defendant from any obligation imposed by this Consent Decree unless the party to whom the right, title or interest has been transferred agrees in writing to fulfill the obligations of this Consent Decree. U.S. Energy agrees not to oppose entry of this Consent Decree and agrees not to contest the validity of this Consent Decree in any subsequent proceeding to implement or enforce its terms.

### III. FACTUAL BACKGROUND AND APPLICABLE DEFINITIONS

3. (a). U.S. Energy is a “person” as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e), and the federal and state regulations promulgated pursuant to the Act.

(b). U.S. Energy owns and operates a plant in Russell, Kansas, for the manufacture of ethanol (“Facility”). The ethanol facility is a separate facility and does not include the wheat gluten plant. This Consent Decree does not apply to the wheat gluten plant. U.S. Energy receives whole corn and milo which are then milled, mixed with water and starch water, cooked, and fermented. After fermentation, the raw product is distilled to produce ethanol. Distillation separates the liquid ethanol from the corn meal, which U.S. Energy may dry or sell as wet mash for animal feed. The Plaintiffs allege that in the course of these manufacturing activities significant quantities of particulate matter (“PM”), particulate matter at or below 10 microns (“PM<sub>10</sub>”), carbon monoxide (“CO”), volatile organic compounds (“VOCs”), nitrogen oxides (“NOx”), sulfur dioxide (“SO<sub>2</sub>”) and other pollutants are generated, including hazardous air pollutants (“HAPs”) listed under Section 112(b)(1), 42 U.S.C. § 7412(b)(1) of the Act. The primary sources of these emissions are the feed dryers, fermentation units, gas boilers, cooling cyclone, ethanol load-out systems, and the fugitive dust emissions from the Facility operations, including roads.

(c). Plaintiffs allege that the Facility is a “major emitting facility,” as defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), and the federal and state regulations promulgated pursuant to the Act.

(d). Definitions: Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the Act, and the federal and state regulations promulgated pursuant to the Act. Specifically, “total organic HAP”, and “Total Organic Compounds”, “organic HAP service”, and “miscellaneous organic chemical manufacturing process unit (MCPU)” are defined in 40 C.F.R. Part 63, Subpart FFFF.

#### IV. COMPLIANCE PROGRAM REQUIREMENT

##### A. INSTALLATION OF CONTROLS AND APPLICABLE EMISSION LIMITS

4. U.S. Energy shall implement a program of compliance at the Facility to attain the emission levels required under this Consent Decree for VOC, PM, PM<sub>10</sub>, CO and NO<sub>x</sub>. U.S. Energy shall implement a plan for the installation of air pollution control technology (“Control Technology Plan”) capable of meeting the following emission level reductions for the identified units in subparagraphs (a) through (m). U.S. Energy’s Control Technology Plan, which has been approved by Plaintiffs, is Attachment 1 to this Consent Decree:

(a). DDGS Dryer: Either 95% reduction of VOC or emissions no higher than 10 parts per million (“PPM”) of VOC, at U.S. Energy’s option; either 98% by weight reduction of total organic HAP or emissions no higher than 20 PPM as organic HAP or Total Organic Compounds (“TOC”) at U.S. Energy’s option; either 90% reduction of CO emissions or emissions no higher than 100 PPM of CO, at U.S. Energy’s option; and reduction of PM and PM<sub>10</sub> based on operation of the Thermal Oxidizer, Regenerative Thermal Oxidizer, or Recuperative Thermal Oxidizer, as specified in the approved Control Technology Plan and as established after initial performance testing pursuant to Paragraph 17 of this Consent Decree. A NO<sub>x</sub> emission factor (in lb/mmBtu) shall be established after initial performance testing required pursuant to Paragraph 17 of this Consent Decree. The emission factor will be used to determine compliance with Paragraph 13.

(b). Centrate Tank: Either 95% reduction of VOC or emissions no higher than 10 PPM, at U.S. Energy’s option; either 98% by

weight reduction of total organic HAP or emissions no higher than 20 PPM as organic HAP or TOC at U.S. Energy's option, to be achieved by operation of the Thermal Oxidizer, Regenerative Thermal Oxidizer, or Recuperative Thermal Oxidizer.

(c). Fermentation Units (including the Beer Well): Either 97% reduction of VOC or equal to or less than 20 PPM of VOC at U.S. Energy's option; either 98% by weight reduction of total organic HAP or emissions no higher than 20 PPM as organic HAP or TOC at U.S. Energy's option.

(d). Distillation Units (Misc. Process Vent): Either 95% reduction of VOC or emissions no higher than 10 PPM of VOC, at U.S. Energy's option, either 98% by weight reduction of total organic HAP or emissions no higher than 20 PPM as organic HAP or TOC, at U.S. Energy's option to be achieved by operation of the Thermal Oxidizer, Regenerative Thermal Oxidizer, or Recuperative Thermal Oxidizer.

(e). Existing Gas Boiler # 1: Continue to operate existing burner. The hours of operation of the boiler shall not exceed 876 hours based on a 12-month rolling sum, rolled monthly, recorded daily. Subject to group NOx cap of 21.4 tons per year ("TPY"). A NOx emission factor (in lb/mmBtu) shall be established after initial performance testing required by this Consent Decree. The emission factor will be used to determine compliance using the method specified in the approved Control Technology Plan.

(f). Cooling Cyclone: VOC emission limit to be established based on data collected from performance testing required by this Consent Decree.

(g). Ethanol Loadout: Truck loadout: Install a closed vent system to vent VOC emissions to a flare for the destruction of captured VOCs. Railcar loadout: All railcars shall be dedicated as ethanol only.

(h). Fugitive VOC: Implement and comply with the requirements of 40 C.F.R. Part 60, Subpart VV; and for equipment that is in organic HAP service that is part of a miscellaneous organic chemical manufacturing process unit (MCPU), comply with the requirements of 40 C.F.R. Part 63, Subpart UU.



(i). New Source Performance Standards ("NSPS"): Identify and implement applicable NSPS requirements codified at 40 C.F.R. Part 60. The following NSPS apply: NSPS subpart Dc (Small Industrial Commercial-Institutional Steam Generating Units less than 29 MW (100 million Btu/hour)); NSPS subpart Kb (Volatile Organic Liquid Storage Vessels); and NSPS subpart VV (Synthetic Organic Chemicals Manufacturing Industry Leak Detection, Monitoring and Repair Requirements). The following seven tanks are subject to Subpart Kb: 850, 851, 860, 861, 865, 870, and 872.

(j). Fugitive Dust Control PM/PM<sub>10</sub>: The program described in the approved Control Technology Plan shall be implemented to minimize fugitive dust emissions from the Facility operations.

(k). Additional Requirements for NO<sub>x</sub> Emission Units: A group NO<sub>x</sub> limit shall not exceed 21.4 TPY NO<sub>x</sub> for the gas fired boiler and the DDGS dryer. Emission factors for each unit in this group shall be established during the initial performance test required by this Consent Decree and will be used to calculate compliance, based on actual fuel usage for all emissions units in this group as described in the approved Control Technology Plan.

(l). Additional Requirements for HAPs: Beginning no later than 180 days following the start-up of the last piece of control equipment required in the approved Control Technology Plan, U. S. Energy shall continually operate the Facility so as not to exceed source-wide allowable emissions of 9.0 TPY for any single HAP or 24.0 TPY for all HAPs based on a 12-month rolling sum, rolled monthly, and recorded monthly. For the first eleven months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12-month rolling sum will be demonstrated based on the schedule to meet applicable emission caps as set forth in the approved Control Technology Plan. If, based on emissions testing as set forth in the approved Control Technology Plan, additional control measures are required to meet the 9.0 or 24.0 TPY emission caps, such control measures shall be implemented and included in the permit application required under Paragraphs 6 and 7.

(m). New Gas Boiler #2 (Alternative Scenario): If U.S. Energy elects to install a new boiler to meet the requirements of the Consent Decree, the new boiler shall be installed with Low NO<sub>x</sub> burner(s) and a NO<sub>x</sub> emission limit equal to or less than 0.04 lb NO<sub>x</sub>/mmBtu shall apply to the new boiler.

5. U.S. Energy shall implement the approved Control Technology Plan in accordance with the schedule set forth in that plan. U.S. Energy's approved Control Technology Plan is incorporated by reference herein and made directly enforceable by Plaintiffs under this Consent Decree.

B. PERMITTING AND MODIFICATIONS

6. By no later than 90 days after entry of the Consent Decree, U.S. Energy shall apply to KDHE for a federally-enforceable construction permit. U.S. Energy shall include in its application, and KDHE shall propose to incorporate, the emission limits, monitoring and recordkeeping requirements of the approved Control Technology Plan and this Consent Decree into any existing or new permit issued to the source as federally-enforceable Title I permit conditions and such emission limits, monitoring and recordkeeping requirements shall remain applicable to the source for the life of its operation or until changed through a permit amendment. Requirements under this Consent Decree excluded under this Paragraph as Title I conditions are NSPS Subparts Dc, Kb, and VV, and the fugitive emission control program referenced in Paragraphs 4(h) and (i), respectively. In addition, the Consent Decree shall be referenced in the permit as the legal basis for all applicable requirements created by the Consent Decree. To the extent that the terms of the permit issued by KDHE are consistent with the provisions of this Consent Decree, U.S. Energy agrees not to contest such permit terms.

7. By no later than 180 days following start-up of the last piece of control equipment required by this Consent Decree, U.S. Energy shall apply to KDHE for modification to its federally enforceable construction permits to incorporate those emission limits, monitoring

parameters, and recordkeeping set forth in this Consent Decree that have not already been incorporated into the appropriate permits as required in Paragraph 6. By no later than sixty (60) days following start-up of the last piece of control equipment required by this Consent Decree, U.S. Energy shall apply to KDHE for the appropriate operating permit, to the extent required, in accordance with K.A.R. 28-19-500 et seq.

8. Future Modifications: U.S. Energy shall obtain a federally-enforceable permit prior to beginning construction or operation of any future modification to occur prior to termination of the Consent Decree, that will result in a significant net emission increase as defined by 40 C.F.R. Part 52, but will not exceed the 95 TPY allowable emission caps. The modifications required in Part IV Section A (“Installation of Controls and Applicable Emission Limits”) and the approved Control Technology Plan of this Consent Decree are excluded from the requirements of this Paragraph. For purposes of determining whether a modification will result in a significant net emissions increase, U.S. Energy shall use representative test results from its initial performance tests, as required by Paragraph 17, to determine its past actual emissions baseline.

9. If, as a result of any future modifications, the total limited potential emissions of VOCs, PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> or CO will exceed the 95 TPY allowable emission caps prior to termination of the Consent Decree, then U.S. Energy shall complete and submit for KDHE approval a source-wide PSD/NSR permit application that includes the approved Control Technology Plan requirements as set forth in this Consent Decree. To the extent that U.S. Energy demonstrates, through results of performance tests or evidence of operating conditions, that the Facility has operated below the 95 TPY emission caps for 24 months, the Facility shall be treated

as a synthetic minor for air permitting requirements and permit requirements for future modifications will be governed by applicable state and federal regulations.

10. In determining whether a future modification will result in a significant net emissions increase, U.S. Energy cannot take credit for any emission reductions resulting from the implementation of the approved Control Technology Plan for netting purposes as defined by 40 C.F.R. § 52.21(b)(3). In addition, the emission reductions of PM, PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub> and CO required under this Consent Decree and the applicable NSPS may not be used for any emissions offset, banking, selling or trading program. VOC emissions reductions up to 98% of the uncontrolled feed dryer emissions may not be used for any emissions offset, banking, selling or trading program.

#### C. EMISSION LIMITS

11. Unit Emission Limits for DDGS Dryer, Centrate Tank, Fermentation Units, Ethanol Truck Loadout: U.S. Energy shall install the air pollution control technology in accordance with the schedule contained in the approved Control Technology Plan capable of meeting the emission level reductions for the identified units in Paragraph 4. Beginning no later than 180 days following the start-up of each piece of control equipment required in its approved Control Technology Plan, U.S. Energy shall continually operate each unit in accordance with the operating parameters set forth in the approved Control Technology Plan.

12. Unit Emission Limit for Cooling Cyclone: By no later than 12-months after the date of entry of this Consent Decree, U.S. Energy shall convert the DDGS dryer from a single pass dryer with no air re-circulation to a dryer with air re-circulation. By no later than 90 days

following the initial performance test of the control equipment for the cooling cyclone as required in Paragraphs 4(f) and 17, U.S. Energy shall propose VOC emission limits for the cooling cyclone based on the data collected from initial performance testing, factoring in a reasonable certainty of compliance, and other available pertinent information. U.S. Energy shall immediately comply with the proposed emission limit. EPA and KDHE will use the data collected, a reasonable certainty of compliance, and other available pertinent information to establish limits for VOC. EPA and KDHE shall provide written notice to U.S. Energy of the established limit and the established limit shall be incorporated into and enforceable under this Consent Decree. If the limit established by EPA and KDHE is more stringent than the limit proposed by U.S. Energy, then U.S. Energy shall have 60 days from the date of written notice to comply with the established limit, unless within the 60 day period, U.S. Energy contests the EPA/KDHE proposed limit, by invoking the Dispute Resolution process pursuant to Part IX ("Dispute Resolution"). Until a limit is established under the Dispute Resolution process herein, U.S. Energy shall comply with the emission limit it proposed under this Paragraph.

13. Group NOx Cap: Following the initial performance test required in Paragraph 17, U.S. Energy shall establish unit specific NOx emission factors that it will use to calculate actual NOx emissions to demonstrate compliance with Paragraph 4(k). The method to determine compliance with the limit in Paragraph 4(k) is specified in the approved Control Technology Plan. Beginning no later than 180 days following start-up of the last piece of control equipment required in its approved Control Technology Plan, U.S. Energy shall continually operate the Facility so as not to exceed the group NOx emission cap of 21.4 TPY for NOx based on a 12 month rolling sum, rolled monthly, and recorded monthly according to the equation in the

approved Control Technology Plan. For the first 11 months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12 month rolling sum will be demonstrated based on the schedule as set forth in the approved Control Technology Plan. This provision shall survive termination of this Consent Decree until the 21.4 TPY emission cap is amended by or incorporated into a federally-enforceable permit for the Facility.

14. PM and PM<sub>10</sub> Emission Limit for DDGS Dryer: By no later than 90 days following the initial performance test of the control equipment for the DDGS dryer as required in Paragraphs 4(a) and 17, U.S. Energy shall propose PM and PM<sub>10</sub> emission limits for the DDGS dryer based on the data collected from initial performance testing, factoring in a reasonable certainty of compliance, and other available pertinent information. U.S. Energy shall immediately comply with the proposed emission limit. EPA and KDHE will use the data collected, a reasonable certainty of compliance and other available pertinent information to establish limits for PM and PM<sub>10</sub>. EPA and KDHE shall provide written notice to U.S. Energy of the established limit and the established limit shall be incorporated into and enforceable under this Consent Decree. If the limit established by EPA and KDHE is more stringent than the limit proposed by U.S. Energy, then U.S. Energy shall have 60 days from the date of written notice to comply with the established limit, unless within the 60 day period, U.S. Energy contests the EPA/KDHE proposed limit, by invoking the Dispute Resolution process pursuant to Part IX ("Dispute Resolution"). Until a limit is established under the Dispute Resolution process herein, U.S. Energy shall comply with the emission limit it proposed under this Paragraph.

15. Source-wide Caps:

(a). U.S. Energy shall accept source-wide allowable emission caps for the Facility equivalent to 95 TPY, for each pollutant, for VOCs, PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO for a period of 24 months or until termination of this Consent Decree whichever is later. Beginning no later than 180 days following start-up of the last piece of control equipment required in its approved Control Technology Plan, U.S. Energy shall continually operate the Facility so as not to exceed the source-wide allowable emission caps of 95 TPY for each pollutant for VOCs, PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO based on a 12-month rolling sum, rolled monthly, and recorded monthly. For the first 11 months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12-month rolling sum will be demonstrated based on a schedule to meet applicable emission caps as set forth in the approved Control Technology Plan.

(b). Beginning no later than 180 days following start-up of the last piece of control equipment required in its approved Control Technology Plan, U.S. Energy shall continually operate the Facility so as not to exceed the source-wide allowable emission caps of 9.0 TPY for any single hazardous air pollutant or 24.0 TPY for all hazardous air pollutants based on a 12-month rolling sum, rolled monthly, and recorded monthly. For the first 11 months, beginning no later than 180 days following start-up of the last piece of control equipment required in the approved Control Technology Plan, compliance with the 12-month rolling sum will be demonstrated based on a schedule to meet applicable emission caps as set forth in the approved Control Technology Plan. This provision shall survive termination of this Consent Decree until the 9.0 TPY and 24.0 TPY emission caps are amended by or incorporated into a federally-enforceable permit for the Facility.

#### D. DEMONSTRATION OF COMPLIANCE

16. U.S. Energy shall demonstrate continuous compliance with the emission limits established under this Consent Decree by the use of performance testing, parametric monitoring, recordkeeping and reporting, or initial and periodic compliance testing, as appropriate, as set forth in the approved Control Technology Plan. Until termination of the Consent Decree, U.S. Energy shall conduct: (1) annual performance tests on the DDGS dryer; and (2) performance tests on all other units in accordance with the frequency set forth in Attachment 2. All such tests shall be conducted using the methods set forth in 7.0 of the approved Control Technology Plan to demonstrate compliance with the emission limits therein unless this requirement is waived in writing by KDHE and EPA.

17. By no later than 120 days following the start-up of the last piece of control equipment required in the approved Control Technology Plan, U.S. Energy shall demonstrate through an initial performance test that it has met the required destruction efficiency and/or emission limit of each emissions unit as specified in the approved Control Technology Plan.

18. All performance testing protocol shall be submitted to KDHE and EPA for review at least 30 days prior to testing. The performance testing shall be conducted using EPA promulgated methods (as total VOC mass) and in accordance with a test protocol approved by the parties. Within 60 days of the test date, test results shall be submitted to KDHE and EPA.

19. U.S. Energy shall maintain control technology performance criteria monitoring data and records as set forth in the approved Control Technology Plan, and shall make them available to the Plaintiffs upon demand as soon as practicable.



#### E. RECORDKEEPING AND REPORTING REQUIREMENTS

20. Beginning with the first full calendar quarter following lodging of this Consent Decree, U.S. Energy shall submit written reports within 30 days following each calendar quarter to KDHE and EPA that itemize Consent Decree requirements and the approved Control Technology Plan requirements, the applicable deadlines, the dates the tasks were completed, unit emissions data and data to support U.S. Energy's compliance status with the terms of this Consent Decree. Reports shall be sent to the addresses identified in Paragraph 55 ("Notice"). Emissions data may be submitted in electronic format.

21. U.S. Energy shall maintain records to demonstrate compliance with New Source Performance Standards ("NSPS"), 40 C.F.R., Part 60, Subparts Dc, Kb, and VV, its fugitive dust management program as described in the approved Control Technology Plan, and with 40 C.F.R. Part 63, Subpart UU for equipment in organic HAP Service that is part of an MCPU.

22. U.S. Energy shall maintain records to demonstrate compliance with the source wide caps required under Paragraph 15.

23. U.S. Energy shall preserve and retain all records and documents now in its possession or control, or which come into its possession or control, that support the reporting and compliance requirements under this Part for a period of three years following the termination of this Consent Decree, unless other regulations require the records to be maintained longer.

24. All notices, reports or any other submissions from U.S. Energy shall contain the following certification and may be signed by an owner or operator of the company responsible for environmental management and compliance:

“I certify under penalty of law that I have personally examined the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

#### V. CIVIL PENALTY

25. Within 30 calendar days of entry of this Consent Decree, the Defendant shall pay to the Plaintiffs a civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413, in the amount of \$30,000. Pursuant to the Act, the following factors were considered in determining a civil penalty, in addition to other factors as justice may require, the size of the business, the economic impact of the penalty on the business, the violator’s full compliance history and good faith efforts to comply, the duration of the violation, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

26. Of the total penalty, \$15,000, shall be paid to the United States by Electronic Funds Transfer (“EFT”) to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-2-1-08117, and the civil action case name and case number of the District of Kansas. The costs of such EFT shall be U.S. Energy’s responsibility. Payment shall be made in accordance with instructions provided to U.S. Energy by the Financial Litigation Unit of the U.S. Attorney’s Office in the District of Kansas. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. U.S. Energy shall provide notice of payment, referencing the USAO File Number

and DOJ Case Number 90-5-1-08117, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 55 ("Notice"). The total remaining amount, \$15,000 in civil penalties, shall be paid to the Plaintiff-Intervenor the State of Kansas. Payment to the Plaintiff-Intervenor the State of Kansas shall be made in the form of a certified check payable to the Kansas Department of Health and Environment and delivered to:

Roderick L. Bremby, Secretary  
Kansas Department of Health and Environment  
Charles Curtis State Office Building  
1000 S.W. Jackson, Suite 560  
Topeka, Kansas 66612-1368

27. The Defendant shall pay statutory interest on any over due civil penalty or stipulated penalty amount at the rate specified in 31 U.S.C. § 3717. Upon entry of this Consent Decree, this Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedure Act, 28 U.S.C. § 3001-3308, and other applicable federal and state authority. The Plaintiffs shall be deemed a judgment creditor for purposes of collection of any unpaid amounts of the civil and stipulated penalties and interest.

28. No amount of the \$30,000 civil penalty to be paid by U.S. Energy shall be used to reduce its federal or state tax obligations.

#### VI. STIPULATED PENALTIES

29. The Defendant shall pay stipulated penalties in the amounts set forth below to the Plaintiffs, to be paid 50% to the United States and 50% to the Plaintiff-Intervenor, for the following:

(a). for each day of failure to propose VOC, PM, and PM<sub>10</sub> emission limits

under Paragraphs 12 and 14:

1st through 30th day after deadline	\$ 250
31st through 60th day after deadline	\$500
Beyond the 60 <sup>th</sup> day	\$1000

(b). for each day of failure to meet the deadlines for installation of control

technology systems set forth in the Control Technology Plan and applying for, or obtaining, permits under Paragraphs 6 and 7:

1st through 30th day after deadline	\$800
31st through 60th day after deadline	\$1,200
Beyond 60th day	\$2,000

(c). for failure to conduct a performance test as required by Paragraphs 16 and

17, per day per unit:

1st through 30th day after deadline	\$250
31st through 60th day after deadline	\$500
Beyond 60th day	\$1,000

(d). for failure to demonstrate compliance with emission limits set forth in the

approved Control Technology Plan or emission limits set pursuant to Part IV Section C

("Emission Limits"): \$5,000 per emissions test for each pollutant

(e). for each failure to submit reports or studies as required by Part IV Section E (“Recordkeeping and Reporting Requirements”) of this Consent Decree, per day per report or notice:

1st through 30th day after deadline	\$250
31st through 60th day after deadline	\$500
Beyond 60th day	\$1,000

(f). for failure to pay or escrow stipulated penalties, as specified in Paragraphs 30 and 31 of this section, \$500 per day per penalty demand.

(g). for failure to notify the Plaintiffs pursuant to Paragraph 2 of U.S. Energy’s sale or transfer of the Facility, \$250 per day.

30. U.S. Energy shall pay stipulated penalties upon written demand by the Plaintiffs no later than 30 days after Defendant receives such demand. Stipulated penalties shall be paid to the Plaintiffs in the manner set forth in Part V (“Civil Penalty”) of this Consent Decree.

31. Should U.S. Energy dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the Plaintiffs by placing the disputed amount demanded by the Plaintiffs, not to exceed \$20,000 for any given event or related series of events, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part IX within the time provided in Paragraph 30 for payment of stipulated penalties. If the dispute is thereafter resolved in Defendant’s favor, the escrowed amount plus accrued interest shall be returned to the Defendant. Otherwise the Plaintiffs shall be entitled to the escrowed amount that was determined to be due

by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to the Defendant.

32. The Plaintiffs reserve the right to pursue any other remedies for violations of this Consent Decree to which they are entitled. The Plaintiffs will not seek stipulated penalties and civil or administrative penalties for the same violation of the Consent Decree.

33. The Plaintiffs reserve the right to waive any claim for stipulated penalties under this Consent Decree.

#### VII. RIGHT OF ENTRY

34. Any authorized agent or representative of the EPA or KDHE, upon presentation of proper credentials and in compliance with the Facility's safety requirements, shall have a right of entry upon the premises of the Facility identified herein at Paragraph 3(b) at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting equipment, and inspecting and copying all records maintained by Defendant required by this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA and KDHE to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414, and or any other applicable federal or state law.

#### VIII. FORCE MAJEURE

35. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Defendant shall notify the Plaintiffs in writing as soon as practicable, but in any event within 20 business days of when Defendant first knew of the event or should have known of the event by the exercise of due

diligence. In this notice Defendant shall specifically reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Defendant to prevent or minimize the delay and the schedule by which those measures will be implemented. Defendant shall adopt all reasonable measures to avoid or minimize such delays.

36. Failure by Defendant to provide notice to Plaintiffs of an event which causes or may cause a delay or impediment to performance shall render this Part VIII voidable by the Plaintiffs as to the specific event for which the Defendant has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

37. The United States or KDHE shall notify the Defendant in writing regarding the Defendant's claim of a delay or impediment to performance as soon as practicable, but in any event within 30 days of receipt of the Force Majeure notice provided under Paragraph 35. If the Plaintiffs agree that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. The Defendant shall not be liable for stipulated penalties for the period of any such delay.

38. If the Plaintiffs do not accept the Defendant's claim that a delay or impediment to performance is caused by a force majeure event, to avoid payment of stipulated penalties, the

Defendant must submit the matter to this Court for resolution within 20 business days after receiving written notice of the Plaintiffs' position, by filing a petition for determination with this Court. Once the Defendant has submitted this matter to this Court, the Plaintiffs shall have 20 business days to file its response to said petition. If the Defendant submits the matter to this Court for resolution and the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the Defendant shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

39. The Defendant shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that the Defendant could not have prevented the delay by the exercise of due diligence. The Defendant shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

40. Unanticipated or increased costs or expenses associated with the performance of the Defendant's obligations under this Consent Decree shall not constitute circumstances beyond the control of the Defendant, or serve as a basis for an extension of time under this Part. However, failure of a permitting authority to issue a necessary permit in a timely fashion is an



event of Force Majeure where the Defendant has taken all steps available to it to obtain the necessary permit including but not limited to:

- (a). submitting a timely and complete permit application;
- (b). responding to requests for additional information by the permitting authority in a timely fashion; and
- (c). prosecuting appeals of any disputed terms and conditions imposed by the permitting authority in an expeditious fashion.

41. As part of the resolution of any matter submitted to this Court under this Part VIII, the parties by agreement, or this Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the Plaintiffs or approved by this Court. Defendant shall be subject to stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

#### IX. DISPUTE RESOLUTION

42. The dispute resolution procedure provided by this Part IX shall be available to resolve all disputes arising under this Consent Decree, including but not limited to emission limits established by the KDHE in Part IV Section C (“Emission Limits”), except as otherwise provided in Part VIII regarding Force Majeure.

43. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the parties to this Consent Decree to another advising of a dispute pursuant to this Part IX. The notice shall describe the nature of the dispute, and shall state the

noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than 14 days from the receipt of such notice.

44. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond 30 calendar days from the date of the first meeting between representatives of the Plaintiffs and the Defendant, unless the parties' representatives agree to shorten or extend this period.

45. In the event that the parties are unable to reach agreement during such informal negotiation period, the Plaintiffs shall provide the Defendant with a written summary of their position regarding the dispute. The position advanced by the Plaintiffs shall be considered binding unless, within 45 calendar days of the Defendant's receipt of the written summary of the Plaintiffs position, the Defendant files with this Court a petition which describes the nature of the dispute, and includes a statement of the Defendant's position and any supporting data, analysis, and/or documentation relied on by the Defendant. The Plaintiffs shall respond to the petition within 45 calendar days of filing.

46. Where the nature of the dispute is such that a more timely resolution of the issue may be required, a party to the dispute may file a motion with the Court seeking to modify the time periods set out in this Part IX.

47. As part of the resolution of any dispute submitted to dispute resolution, the parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the

schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Defendant shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

## X. GENERAL PROVISIONS

48. Effect of Settlement. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with any applicable federal, state or local laws or regulations. To the extent that the terms of this Consent Decree conflict with the terms of any air quality permit, the terms of this Consent Decree shall control during the effective period of the Consent Decree.

49. Resolution of Claims. Satisfaction of all of the requirements of this Consent Decree constitutes full settlement of and shall resolve all past civil and administrative liability of the Defendant to the Plaintiffs for the violations alleged in the United States' and Plaintiff-Intervenor's Complaints and all civil and administrative liability of the Defendant for any violations at the Facility based on facts and events that occurred during the relevant time period under the following statutory and regulatory provisions: (a) NSPS, 40 C.F.R. Part 60, including Subparts Dc, Kb, and VV; (b) National Emission Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, pursuant to Sections 112(d) and 112(g) of the Act; (c) PSD requirements at Part C of the Act and the regulations promulgated thereunder at 40 C.F.R. § 52.21, and the Kansas regulations which incorporate and/or implement the above-listed federal regulations in items (a) through (c); including NSPS, K.A.R. 28-19-720; Section 112(g) of the Act, K.A.R. 28-19-752a;

(d) all air permit requirements under K.A.R. 28-19-350, K.A.R. 28-19-300 and K.A.R. 28-19-500; (e) air emissions fee requirements under K.A.R. 28-19-304; (f) particulate matter emission limitations requirements under K.A.R. 28-19-20; (g) opacity requirements under K.A.R. 28-19-650; (h) boiler requirements under K.A.R. 28-19-31; and, (i) calculation of actual emissions under K.A.R. 28-19-210. For purposes of this Consent Decree, the “relevant time period” shall mean the period beginning when the United States’ claims and/or Plaintiff-Intervenor’s claims under the above statutes and regulations accrued through the date of entry of this Consent Decree. During the effective period of the Consent Decree, certain emission units shall be on a compliance schedule and any modification to these units, as defined in 40 C.F.R. § 52.21, which is not required by this Consent Decree is beyond the scope of this resolution of claims. This provision shall survive the termination of the Consent Decree.

50. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendant of its obligation to comply with all applicable federal, state and local laws and regulations. Subject to Paragraph 49, nothing contained in this Consent Decree shall be construed to prevent or limit the United States’ or KDHE’s rights to obtain penalties or injunctive relief under the Act or other federal, state or local statutes or regulations, including but not limited to, Section 303 of the Act, 42 U.S.C. § 7603.

51. Third Parties. Except as otherwise provided by law, this Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties. Nothing in this Consent Decree should be construed to create any rights, or grant any cause of action, to any person not a party to this Consent Decree.

52. Costs. Each party to this Consent Decree shall bear its own costs and attorneys' fees through the date of entry of this Consent Decree.

53. Public Documents. All information and documents submitted by the Defendant to the Plaintiffs pursuant to this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by the Defendant in accordance with 40 C.F.R. Part 2 and the Kansas Open Records Act, K.S.A. 45-215 et. seq.

54. Public Comments - Federal Approval. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments. The United States reserves the right to withdraw or withhold consent if the comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper or inadequate. The Defendant and the Plaintiff-Intervenor consent to the entry of this Consent Decree.

55. Notice. Unless otherwise provided herein, notifications to or communications with the United States, EPA, KDHE or the Defendant shall be deemed submitted on the date they are postmarked and sent either by overnight receipt mail service or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, KDHE or the Defendant is required by the terms of this Consent Decree, it shall be addressed as follows:

As to the United States:

Thomas L. Sansonetti  
Assistant Attorney General  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611, Ben Franklin Station  
Washington, DC 20044-7611

As to the EPA:

Adam Kushner  
Acting Director, Air Enforcement Division  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code 2242-A  
Washington, DC 20004

and the EPA Regional office for the region in which the Facility is located:

Region 7:

Bill Peterson  
Air Permitting and Compliance  
U.S. Environmental Protection Agency  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66106

As to U.S. Energy Partners, LLC:

Sarah Toevs Sullivan  
Shook, Hardy & Bacon, L.L.P.  
2555 Grand  
Kansas City, Missouri 64108

As to Plaintiff-Intervenor the State of Kansas, through the KDHE:

Roderick L. Bremby, Secretary  
Kansas Department of Health and Environment  
Charles Curtis State Office Building  
1000 S.W. Jackson, Suite 560  
Topeka, Kansas 66612-1368

56. Change of Notice Recipient. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

57. Modification. There shall be no modification of this Consent Decree without written agreement of all the parties. There shall be no material modification of this Consent Decree without the written agreement of the parties and by Order of the Court. Prior to complete termination of the requirements of this Consent Decree pursuant to Paragraph 59, the parties may, upon motion to the Court, seek to terminate provisions of this Consent Decree.

58. Continuing Jurisdiction. The Court retains jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

#### XI. TERMINATION

59. This Consent Decree shall be subject to termination upon motion by any party after the Defendant satisfies all requirements of this Consent Decree and has operated the control technologies identified in the approved Control Technology Plan in compliance with the emission

limits, and has demonstrated for 24 months that its actual emissions of VOCs, PM, PM<sub>10</sub>, SO<sub>2</sub>, NOx and CO have remained under 95 TPY, unless Defendant has applied for and received a PSD/NSR permit or has otherwise complied with applicable requirements. For purposes of meeting the 24-month performance requirement in this Paragraph, Defendant may demonstrate that its actual emissions remained under the 95 TPY allowable emission caps by either using the results of its initial compliance tests or evidence of operating conditions since the installation of the control equipment required in this Consent Decree and in the approved Control Technology Plan. At such time, if the Defendant believes that it is in compliance with the requirements of this Consent Decree, and has paid the civil penalty and any stipulated penalties required by this Consent Decree, then the Defendant shall so certify to the Plaintiffs, and unless the Plaintiffs object in writing with specific reasons within 45 days of receipt of the certification, the Court shall order that this Consent Decree be terminated on Defendant's motion. If the United States or KDHE objects to the Defendant's certification, then the matter shall be submitted to the Court for resolution under Part IX ("Dispute Resolution") of this Consent Decree. In such case, the Defendant shall bear the burden of proving that this Consent Decree should be terminated.

So entered in accordance with the foregoing this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

---

United States District Court Judge  
District of Kansas



THE UNDERSIGNED enter into this Consent Decree in the matter of  
United States et al. v. U.S. Energy Partners, LLC

FOR PLAINTIFF, UNITED STATES OF AMERICA:

\_\_\_\_\_  
Thomas L. Sansonetti  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
10<sup>th</sup> & Pennsylvania Avenue, N.W.  
Washington, DC 20530

Date 12.12.04

\_\_\_\_\_  
Julie M. Van Horn  
Special Department of Justice Appointment  
Environment and Natural Resources Division  
U.S. Department of Justice  
10<sup>th</sup> & Pennsylvania Avenue, N.W.  
Washington, DC 20530

Date 20 August 2004

THE UNDERSIGNED enter into this Consent Decree in the matter of  
United States et al. v. U.S. Energy Partners, LLC

ERIC F. MELGREN  
UNITED STATES ATTORNEY

By \_\_\_\_\_  
EMILY METZGER  
ASSISTANT UNITED STATES ATTORNEY  
1200 Epic Center  
301 North Main Street  
Wichita, Kansas 67212

Date \_\_\_\_\_

Kansas Supreme Court Number 10750

THE UNDERSIGNED enter into this Consent Decree in the matter of  
United States et al. v. U.S. Energy Partners, LLC

FOR U.S. ENVIRONMENTAL PROTECTION AGENCY:

/

\_\_\_\_\_  
Thomas V. Skinner  
Acting Assistant Administrator  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Date 10/28/04

\_\_\_\_\_  
James B. Gulliford  
Regional Administrator  
U.S. Environmental Protection Agency  
Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

Date 8/24/04

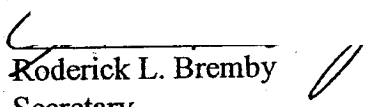
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Martha R. Steincamp  
Regional Counsel  
U.S. Environmental Protection Agency  
Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

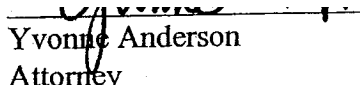
**AUG 18 2004**  
Date \_\_\_\_\_

THE UNDERSIGNED enter into this Consent Decree in the matter of  
United States et al. v. U.S. Energy Partners, LLC

FOR THE STATE OF KANSAS:

  
Roderick L. Bremby  
Secretary  
Kansas Department of Health and Environment  
Charles Curtis State Office Building  
1000 S.W. Jackson, Suite 560  
Topeka, Kansas 66612

Date 8-17-04

  
Yvonne Anderson  
Attorney  
Kansas Department of Health and Environment  
Charles Curtis State Office Building  
1000 S.W. Jackson, Suite 560  
Topeka, Kansas 66612

Date 8-17-04

THE UNDERSIGNED enter into this Consent Decree in the matter of  
United States et al. v. U.S. Energy Partners, LLC

FOR DEFENDANT, U.S. Energy Partners, LLC:

\_\_\_\_\_  
U.S. Energy Partners, LLC

Date 8-23-04

**Control Technology Plan**

**For**

**U.S. Energy Partners, LLC**

**1224 E. 15<sup>th</sup> Street**

**Russell, Kansas 67665**

**Attachment 1**

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## 1.0 INTRODUCTION

This Control Technology Plan (CTP) is an integral part of the Consent Decree. This CTP contains:

- a) Identification of all units to be controlled;
- b) Engineering design criteria for all proposed controls capable of meeting the emission levels required by Part V of the Consent Decree;
- c) Proposed short-term and long-term emission limits and controlled outlet concentrations for each pollutant as appropriate;
- d) A schedule for expedited installation with specific milestones applicable on a unit-by-unit basis;
- e) Proposed monitoring parameters for all control equipment and parameter ranges;
- f) Identification of all units to be emission tested and a schedule for initial tests and retests;
- g) The test methods that will be used to demonstrate compliance with the emission levels set forth in the Consent Decree;
- h) Program for minimization of fugitive dust emissions from facility operations.



## 2.0 EMISSION UNITS REQUIRING POLLUTION CONTROL EQUIPMENT

The following emission units, fugitive sources, and control equipment have been designated as affected units in the Consent Decree and have emission limits requiring pollution control technology.

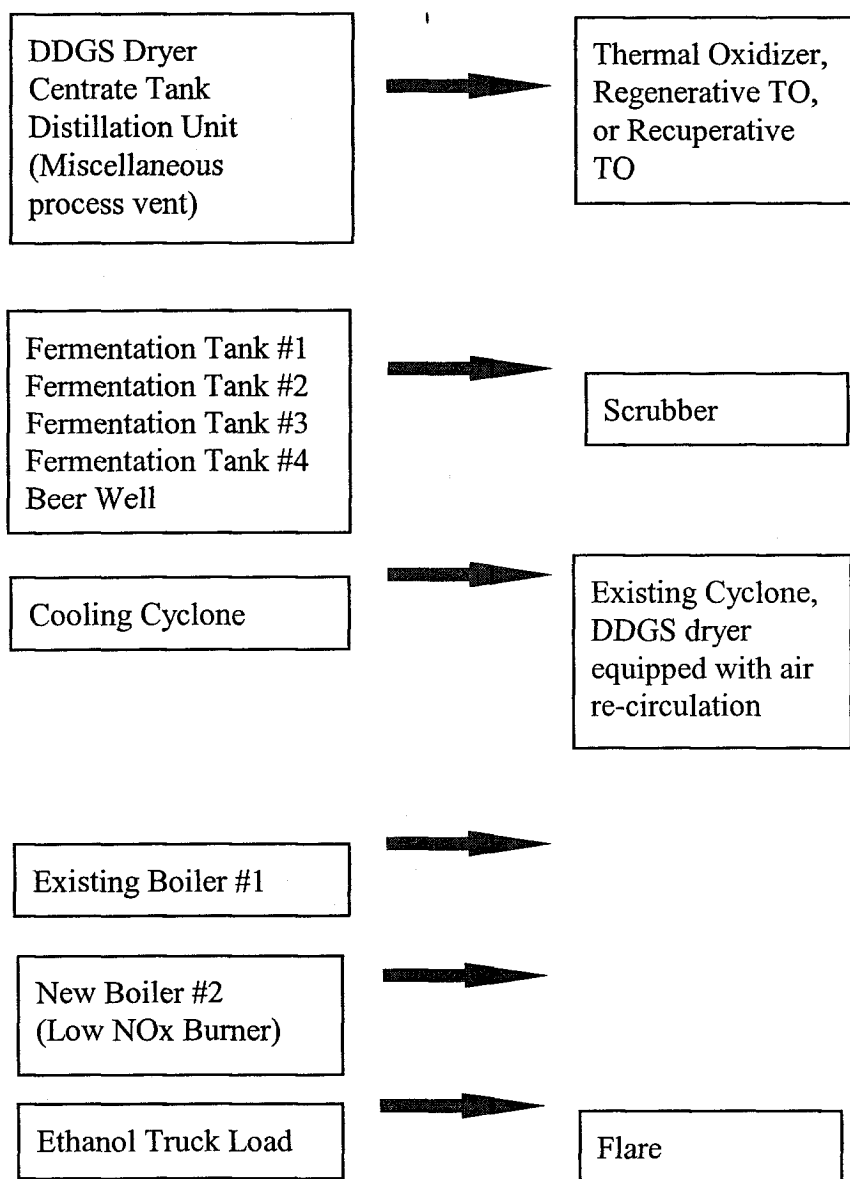
Unit Description	Control Equipment Description
DDGS Dryer	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election, Group NOx Emission cap (applies to dryer).
Centrate Tank	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election
Fermentation Units (including the Beer Well)	Water Scrubber
Distillation Unit (Miscellaneous process vent)	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election
Existing Gas Fired Boiler #1	Group NOx Emission cap, limit hours of operation.
Cooling Cyclone	Existing Cyclone and DDGS dryer shall be converted from a single pass to a dryer with air re-circulation.
Ethanol Truck Load out	Flare
Valves, Flanges, and Seal Fugitive Emissions	LDAR program under NSPS VV and for equipment that is in organic HAP service that is part of an MCPU, 40 C.F.R. Part 63, Subpart UU.
Truck/car Traffic	Dust Control Program
New Gas Fired Boiler #2 (alternative scenario)	Low NOx Burner(s)
City of Russell Turbine Exhaust	Discontinue use in DDGS Dryer

### 3.0 ENGINEERING DESIGN CRITERIA FOR POLLUTION CONTROL EQUIPMENT

Any deviation from the design criteria listed here shall be reported in the quarterly reports required under this Consent Decree. The specific design criteria listed here are preliminary and subject to change pending development of additional data. Changes to the requirements listed in the following table shall be considered non-material modifications under this Consent Decree, provided U.S. Energy obtains written approval of the change(s) from EPA and KDHE.

Process Description	Control Device Description	Design Operating Parameters
DDGS Dryer, Centrate Tank, Distillation Unit (Misc. process vent)	Thermal Oxidizer, or Recuperative TO, at U.S. Energy's option	Design Fuel Input Rate: up to 95 mmBTU/hr  Residence Time > 0.5 seconds in combustion chamber  Temperature: 1600 °F
	Regenerative Thermal Oxidizer (alternate scenario)	Design Fuel Input Rate: 6 mmBTU/hr  Residence Time > 0.5 seconds in combustion chamber  Temperature: 1600 °F
Fermentation Units (including Beer Well)	Water Scrubber	Gas Flow Rate: 5200 ACFM (design)  Water Flowrate: 20 - 50 gpm (design)  Pressure drop: 2 - 20 in. H <sub>2</sub> O (design)
Cooling Cyclone	Existing Cyclone	Gas Flowrate: 24,000 ACFM (design)
Ethanol Truck Load out	Flare	40 C.F.R. § 60.18 NSPS standards

The following diagram presents the affected units and associated control technology as determined by the results of engineering design criteria.



#### 4.0 EMISSION LIMITS FROM POLLUTION CONTROL EQUIPMENT

Unless otherwise stated, all controlled emission limitations (including operating parameter ranges and limits) apply at all times except during periods of previously planned startup and shutdown periods, and malfunctions as defined in 40 C.F.R. section 63.2. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, U.S. Energy shall minimize emissions to the greatest extent practicable. To the extent practical, startup and shutdown of pollution control technology systems will be performed during times when process equipment is also shut down for routine maintenance. U.S. Energy shall also, to the extent practicable, control emissions during a malfunction event in a manner consistent with good air pollution control practice for minimizing emissions.

Any deviation from the requirements in 4.0 and/or 4.1 shall be reported in the quarterly reports and as required under other state and federal regulations.

Process Description	Control Device Description	Pollutant	Emission Limit(s)
DDGS Dryer	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election	VOC	95% reduction or $\leq 10$ ppm, at U.S. Energy's election
		HAPs	Either 98% by weight reduction of total organic HAP or emissions no higher than 20 ppm <sub>v</sub> as organic HAP or total organic compounds (TOC) at U.S. Energy's option.
		CO	90% reduction or $\leq 100$ ppm, at U.S. Energy's election
		PM/PM <sub>10</sub>	Test and set limit pursuant to this Consent Decree
		NOx	Group NOx emission cap $\leq 21.4$ TPY (applies to dryer).

Process Description	Control Device Description	Pollutant	Emission Limit(s)
Centrate Tank Distillation Units (Misc. process vent)	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election	VOC	95% reduction or $\leq 10$ ppm, at U.S. Energy's election
		HAPs	Either 98% by weight reduction of total organic HAP or emissions no higher than 20 ppm <sub>v</sub> as organic HAP or total organic compounds (TOC) at U.S. Energy's option.
Fermentation Units (including Beer Well)	Scrubber	VOC	97% reduction or $\leq 20$ ppm, at U.S. Energy's election
		HAPs	Either 98% by weight reduction of total organic HAP or emissions no higher than 20 ppm <sub>v</sub> as organic HAP or total organic compounds (TOC) at U.S. Energy's option.
Cooling Cyclone	Cyclone, convert dryer from single pass to dryer with air re-circulation	VOC	Test and set limit pursuant to this Consent Decree
Existing Boiler #1		NOx	Group NOx emission cap $\leq 21.4$ TPY, hours of operation shall not exceed 876 hours based on a 12 month rolling sum, rolled monthly.

Process Description	Control Device Description	Pollutant	Emission Limit(s)
New Boiler #2 (alternative scenario)	Low NOx Burner(s)	NOx	Low NOx Burners $\leq 0.04$ lb NOx/mmBtu
Ethanol Truck Load Out	Flare	VOC	95% reduction
Source-wide Cap		VOC	12-month rolling sum source-wide VOC cap of 95 TPY.
		HAPs	12-month rolling sum source-wide cap of 9.0 TPY for any single HAP and 24.0 TPY for total HAPs.

During the first 11 months of operation, the facility will maintain the following source-wide emission limits in Tons Per Year:

	Mo 1	Mo 2	Mo 3	Mo 4	Mo 5	Mo 6	Mo 7	Mo 8	Mo 9	Mo 10	Mo 11
Source-wide VOC, CO, NOx, SO <sub>2</sub> and PM/PM <sub>10</sub>	12	24	36	45	56	64	72	80	84	88	92
Individual HAP	1.6	3.2	4.0	4.8	5.6	6.4	7.2	8.0	8.2	8.5	8.8
Total HAPs	3.0	6.0	9.0	12	14	16	18	20	21	22	23

For the Group NOx emission cap established under the Consent Decree, compliance with the “12 month rolling sum” will be demonstrated during the first 11 months of operation beginning no later than 120 days after start up of the Thermal Oxidizer, Regenerative TO, or Recuperative TO required under the Consent Decree, based on the following schedule of limits.

	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Mo. 12
Group NOx cap (tpy)	1.8	3.6	5.4	7.2	9.0	10.8	12.6	14.4	16.2	18.0	19.8	21.4

## Recordkeeping

Record fuel usage monthly for each unit subject to the NOx group emissions cap. Calculate the NOx group emissions from the previous month and the NOx group emissions from the previous 11 months (12 month rolling sum). Calculate the total 12 month rolling sum for NOx emissions from all units according to Equation 1 below:

$$\sum_{i=1}^n E_{ni} = \sum_{i=1}^x [NG_{xi}(\text{MMBtu/month}) \times EF_x(\text{lb / MMBtu}) \times 0.0005(\text{ton / lb})] \quad \text{equation 1}$$

where;

x = number of units;

n = number of months of interest;

$\sum_{i=1}^n E_{ni}$  = sum of monthly NOx emissions from unit x (tons/12 months);

NG<sub>x<sub>i</sub></sub> = i<sup>th</sup> month natural gas usage of emission unit x (MMBtu/month); and

EF<sub>x</sub> = unit specific emission factor determination by stack testing.

## **4.1 ALTERNATIVE OPERATING SCENARIO**

If U.S. Energy elects to install a Regenerative TO not designed for on-line regeneration (i.e. bake-out) to control emissions, then off-line Regenerative TO regeneration will only occur when the DDGS dryer, fermentation units (including Beer Well), and Centrate Tank are shut down.

## 5.0 POLLUTION CONTROL EQUIPMENT INSTALLATION SCHEDULE

U.S. Energy shall install, shake down, and start up the following air pollution control equipment (or optimize existing equipment) and begin complying with the emission limits required by Part V of the Consent Decree by the following dates:

Unit Description	Control Equipment	Date
DDGS Dryer, Centrate Tank, Distillation Unit (Misc. process vent)	Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election	12 months after entry of the Consent Decree
Fermentation Units (including Beer Well)	Water Scrubber	upon entry of the Consent Decree
Cooling cyclone	Existing Cyclone	N/A
	Convert DDGS dryer from a single pass dryer to a dryer with air re-circulation.	12 months after entry of the Consent Decree
Existing Boiler #1	N/A	N/A
New Boiler #2 (alternative scenario)	Low NOx Burners	upon start up
Ethanol Truck Load Out	Flare	6 months after entry of the Consent Decree
Fugitive VOC	LDAR NSPS VV, 40 C.F.R. Part 63, Subpart UU	upon entry of the Consent Decree
Truck Traffic Fugitive Dust Program	Road Sweeper	upon entry of the Consent Decree



## 6.0 MONITORING PARAMETERS FOR POLLUTION CONTROL DEVICES

The Consent Decree requires that monitoring parameters be established for affected pollution control devices. Beginning no later than 60 days following startup of a control device described below, U.S. Energy agrees to the following monitoring parameters for each of the affected pollution control devices. All monitoring data collected above shall be recorded and maintained on-site. Any deviations of monitoring frequency, record keeping and range shall be reported in the quarterly reports and as required under other state and federal regulations.

Control Device Description	Parameter Monitored	Operating Range	Monitoring Frequency
Thermal Oxidizer, Regenerative TO, or Recuperative TO, at U.S. Energy's election	Operating Temperature	$\geq$ TBD <sup>1</sup>	Continuously with low temperature alarm
Scrubber	Liquid Flow Rate	$\geq$ 20 gpm	Continuously
	Pressure Drop	2 to 20 inches of water	Daily
Flare	Presence of a Flame	A device (including but not limited to a flame sensor interlock with truck pumping, a thermocouple, a ultraviolet beam sensor or infrared sensor ) capable of detecting presence of a flame	Continuously during ethanol truck loading

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<sup>1</sup> Value to be proposed by U.S. Energy and approved by EPA and KDHE based on actual operating conditions at the time of the performance test.

## 7.0 POLLUTION CONTROL DEVICE PERFORMANCE TEST SCHEDULE AND TEST METHODS USED

The following schedule and methods will be used to demonstrate compliance with the emission limits contained in this Control Technology Plan and the Consent Decree. U.S. Energy shall conduct the following performance testing pursuant to the schedule under paragraphs 16 and 17, of the Consent Decree. The dryer shall be tested annually, and all other units in the Control Technology Plan according to the schedule set forth in Attachment 2, unless specifically waived in writing by KDHE and EPA.

Emission Unit/Control Device	Pollutant(s) Tested	Test Method
DDGS dryer, Centrate Tank, Distillation Unit/Thermal Oxidizer or Regenerative TO, or Recuperative TO <sup>1</sup>	Total VOC, speciated VOCs and HAPs, NO <sub>x</sub> , CO, PM/PM <sub>10</sub>	Method 1, 2, 3, 3A, or 3B, 4, 5/202, 7E, 10, 18 ("as Total VOC Mass") and 25 or 25A; another EPA promulgated method; in accordance with a test protocol approved by the parties.
Fermentation Units (Including Beer Well) <sup>1</sup>	Total VOC, speciated VOCs and HAPs.	Method 1, 2, 3, 3A, or 3B, 4, 18 ("as Total VOC Mass") and 25 or 25A; another EPA promulgated method; in accordance with a test protocol approved by the parties.
Cyclone Cooler (outlet)	Total VOC, speciated VOCs and HAPs	Method 1, 2, 3, 3A, or 3B, 4, 18 ("as Total VOC Mass") and 25 or 25A; another EPA promulgated method; in accordance with a test protocol approved by the parties.
Existing Boiler #1 and new Boiler #2 (alternative scenario)	NO <sub>x</sub> and CO	Method 7E and 10; another EPA promulgated method; in accordance with a test protocol approved by the parties.

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<sup>1</sup>When any emission limit in the Consent Decree, expressed as ppm is met, only outlet testing is required.

Emission Unit/Control Device	Pollutant(s) Tested	Test Method
Truck Load Out/Flare	VOCs and Visible Emissions	Per 40 CFR 60.18 for open flame flare. For enclosed flame flare, as applicable, Method 1, 2, 3, 3A, or 3B, 4, 18 ("as Total VOC Mass") and 25 or 25A; another EPA promulgated method; in accordance with a test protocol <i>approved by the parties.</i>

## **8.0 FUGITIVE DUST EMISSION CONTROL PROGRAM**

The objectives of the Fugitive Control Program are to prevent and minimize the release of avoidable fugitive emissions as required by the Consent Decree. The Program describes the procedure U.S. Energy will use to control emissions, to determine when emissions are at levels requiring corrective action, and to reduce excessive emissions to acceptable levels.

U.S. Energy has existing paved roads (all normal traffic routes) that are used for truck and car traffic at the ethanol plant. U.S. Energy will implement the following actions to minimize fugitive dust emissions:

1. U.S. Energy will perform weekly visual inspections of the roads.
2. U.S. Energy will document the inspection was performed and describe any corrective action taken.
3. U.S. Energy will sweep the roads within 48 hours of when fugitive emissions are observed that are caused by car/truck traffic on the roads.
4. In the event that sweeping is not possible due to weather conditions; U.S. Energy will use water or mechanical means of removal to minimize fugitive dust emissions.

## Attachment 2

### Performance Test Frequency Criteria

Until termination of the Consent Decree, the following criteria should be used to determine the frequency of performance testing for units in the approved Control Technology Plan, other than the DDGS dryer.

#### NO<sub>x</sub> Testing Frequency for equipment in Group NO<sub>x</sub> cap:

$$X = ( [A - |(A-T)|] \div A ) \times 100\%$$

A = emission factor from test results in year 1

T = emission factor from test results in year 2

Performance testing shall be conducted annually unless, X is greater than or equal to 90% for two or more consecutive years, then the test frequency may be reduced to once every three years. If a subsequent performance test results in X < 90%, the testing frequency shall revert back to the original yearly basis until subsequent yearly testing produces two consecutive tests meeting the above criteria for a three-year test frequency.

#### Testing Frequency for equipment with concentration or emission limits:

X = Pollutant emissions rate or concentration established during a performance test. Test results used to determine X ideally span three tests or more.

Performance Test Results	Performance Test Frequency
If $X \geq 90\%$ of the most stringent limit	The next performance test must be conducted within 12 months.
If $60\% \leq X < 90\%$ of the most stringent limit	The next performance test must be conducted within 36 months.
If $X < 60\%$ of the most stringent limit	The next performance test must be conducted within 60 months.